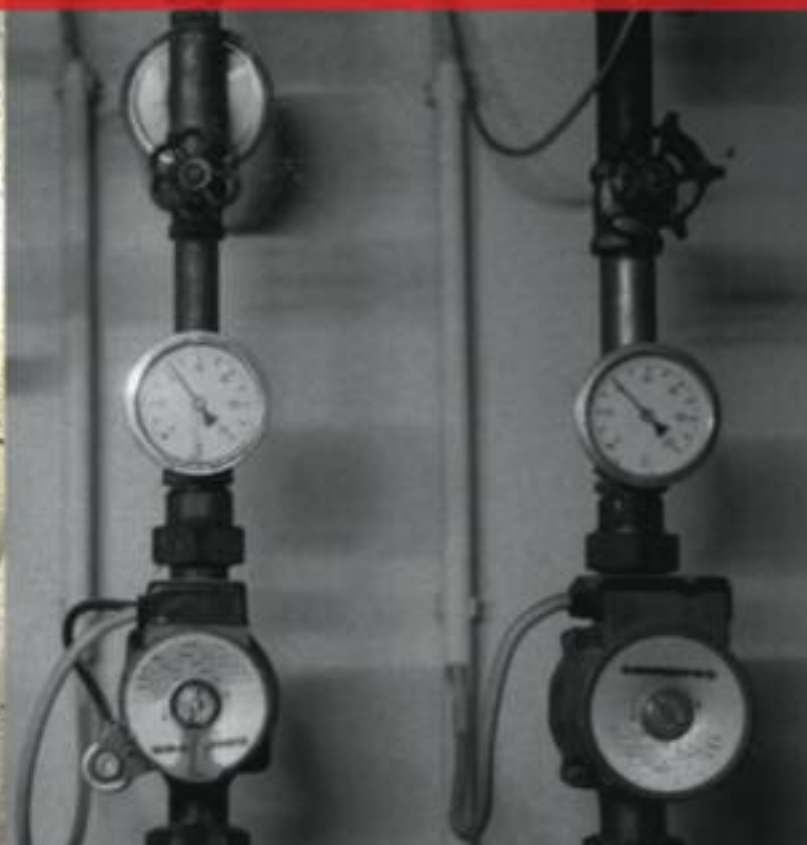
Raytech

Leader in Quality

Building and Thermoidraulic division



Company profile

Raytech has always been synonymous with research and innovation, quality, safety and environmental care.
It is located close to Milan and it operates according to quality standards which comply with the International Standards with respect for the environment; Raytech is certified UNI EN ISO 9001 (ISO 9001:2000).

It is provided with advanced production equipments, instruments for a precise check of the process and a wide storehouse for the finished products; Raytech can satisfy the requirements of its customers with a shipment service within 24 hours from order receipt.
This is thanks to Raytech research; the company uses a wide experience and testing laboratories.

Self-extinguishing rubber either in paste or liquid fast in cross linking, insulating and sealing gel suitable also for high depth installation, professional non toxic adhesives which can replace welding and screwing are some of the recent products developed thanks to Raytech research.

Besides these products, Raytech has in its catalgoue also well-established products such as tapes and electrical components, self regulating heating cables for electric tracing and fire stop barriers.

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A single component adhesive gel for professional use on metals, wood, paper, cardboard and their derivates. 8

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A single component adhesive and sealant gel ; a complete solution for sticking, fixing and sealing plastic, glass, ceramic, cement, plaster, etc…. 8

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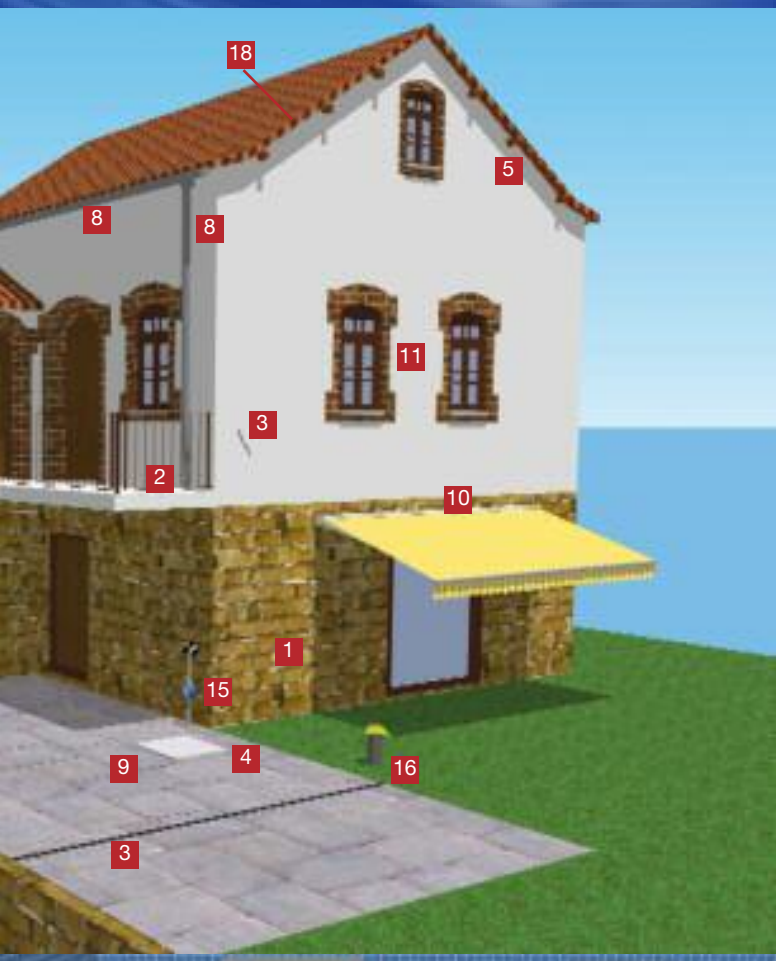
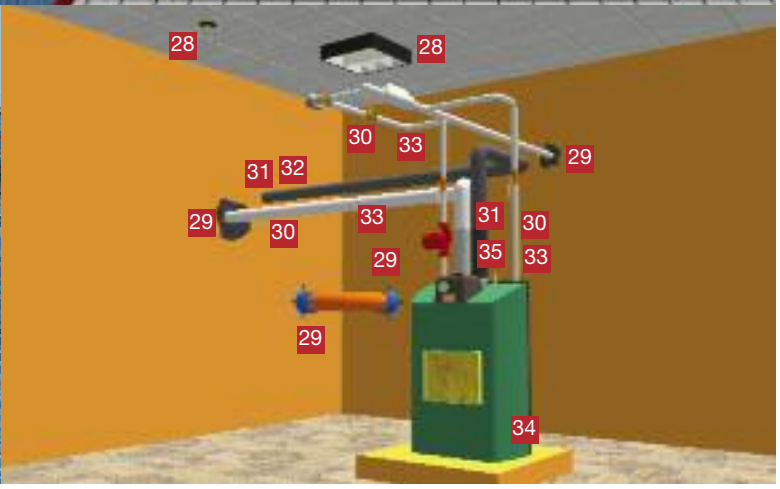
Our solutions





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Sky Plast

Two component insulating rubber in paste; it is mouldable and fire retardant, ideal to cover, protect, seal and make flame retardant any component.
Once mixing the two components 1:1 portion (max. 2 minutes) to obtain and a uniform compound, it quickly crosslinks at room temperature in less than 5 minutes.
Once moulded around the component to protect, Sky Plast becomes shortly a rubber layer with high mechanical characteristics and strong fire resistance.

Characteristics

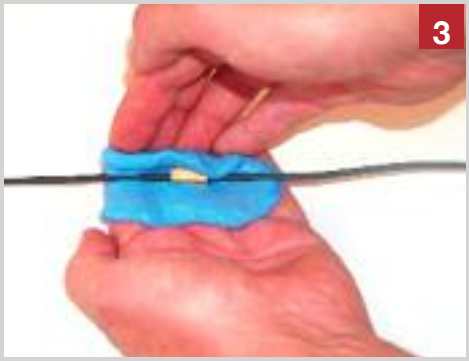
- Non toxic and safe to use.
- Flameproof and Fire-retardant.
- Low smoke and toxic and corrosive gases emission
- Mouldable
- Re-enterable
- Quickly ready for use.
- High mechanical and thermal characteristics.
- Flexible and elastic.

Product code	Kit composition
Sky Plast 250	2 cans 250 gr total
Sky Plast	2 cans 500 gr total

Use sequence

Take equal parts of the components from each can.

Mix (max. 2 minutes) until a uniform compound is obtained.



Mould the mixture on oraround the component to be covered.

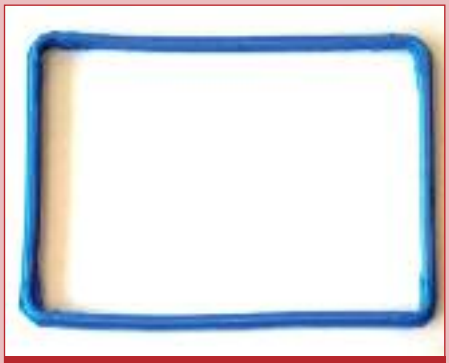
The product becomes rubber in 5 minutes and it is ready for use.

Typical applications

Expansion anchors

Antivibration facilities

Supports



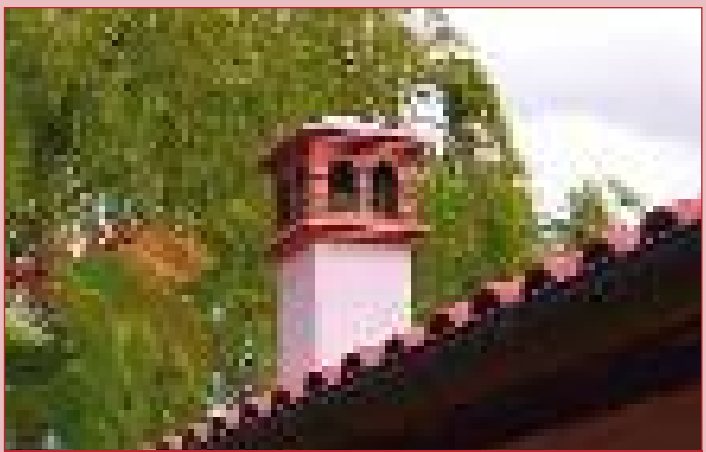
Gaskets

"Ad hoc" gaskets

Sealing of valves

Gaskets for hydraulic valves and taps

Repair and reproduction of surfaced elements, friezes, frames;



Chimneys

Protection from fire

SUPER MAGIC adhesive

One-component adhesive gel with high adhesion characteristics on metals, woods, paper, cardboard and their derivates

Characteristics

- Flexible and elastic.
- Very high adhesion between similar and dissimilar metals.
- High adhesion to wood.
- Non toxic and safe.
- Application at room temperature.
- Without using primer.
- High tensile characteristics and ultimate tensile stress.
- Thixotropic and self-adhesive.
- Skin formation within 5 hours, allowing a long working period, it cross links in 12 hours.
- Very sticky.
- Suitable for external exposition.
- Insulates and seals LV components.

Properties	
• Colour	Translucent
• Working temperature (°C)	-60/ +150
• Shore A hardness	15
• Tensile strenght	1,1 MPa
• Elongation at break	550%

Product code	Kit composition
SUPER MAGIC adhesive	In a 70 ml tube

Typical applications

Steel

Elastic sealing of cracks

Wood

MAGIC PLAST adhesive

One component professional adhesive and sealant gel; a complete solution for sticking, fixing and sealing on plastic, glass, ceramic, cement, plaster, etc...

Characteristics

- Non toxic and safe
- Suitable for sticking and sealing of plastic materials, plaster, cement, glass , etc.
- Suitable for indoor and outdoor use.
- Flexible and elastic.
- Paintable
- Resistant to mould, chemicals, weathering agents and UV radiation.

Warnings: it is not suitable for gluing of PE, PP, bitumen, acrylic glass and components on tension.

Properties	
• Colour	Translucent
• Skin formation	10-15 minutes
• Shore A hardness	60
• Tensile strenght	1,7 MPa
• Elongation at break	250%
• Working temperature (°C)	-40/+100
• Cross linking	3 mm within 24 hours

Product code	Kit composition
MAGIC PLAST adhesive	In a 70 ml tube

Typical applications

Concrete

Plastic

Fixing of skirting-board

RAY FAST adhesive

An instantaneous and invisible adhesive. It rapidly glues ceramics, metals, hard stones, plastic (except polypropylene, polyethylene and PTFE) wood, rubber, paper.
It is very good for gluing immediately very small items; it is perfect for repairing common usage objects: knick-knacks, toys, shoes, costume jewellery, white good frames, eyeglasses, etc…

Characteristics

- A single-component cyanoacrylic adhesive.
- Instantaneous.
- Invisible.
- Perfect for the repair of common usage objects (toys, eyeglasses, shoes…).

Advantages

- For strong, fast and invisible bonding.

Suggestions

- Apply on matching surfaces.

Properties	
• Colour	Limpid, colourless
• Total setting time	24 hours
• Setting speed on steel/steel	10-20 sec
• Cutting resistance (sandblasted steel)	> 15 N/mm^2
• Tensile strength (sandblasted steel)	>18 N/mm^2

Product code	Kit composition

Typical applications

Quick sticking of wood

Quick sticking of plastic

Quick sticking of hide and leather

Quick sticking of metals

Quick sticking of ceramic and porcelain

Magic Gel

Two component gel with high dielectric, thermal and sealing characteristics, contained in 2 bottles; the needed quantity of the 2 components is poured in the small basin in the range of 1 :1, than mixed with a mixing spoon and poured into the particular to be filled.

Characteristics

- Non toxic and safe.
- Fast in cross-linking (5 minutes at + 23°C).
- It cross links also at very low temperature.
- Low viscosity.
- Always re-enterable.
- No shelf life.
- Protection degree higher than IP68.
- For installations up to 1 kV.
- Volume resistivity: > 2x1015 Ω.cm.
- Dielectric strength: > 20 kV / mm.
- Specific weight: 0,96 gr / cm^3

Product code	Kit composition
Magic Gel 300	2 bottles for a total of 300 cc of product
Magic Gel 1000	2 bottles for a total of 1 l of product 1 small basin 1 mixing spoon
Magic Gel 2000	2 bottles for a total of 2 l product 1 small basin 1 mixing spoon

Magic Gel 300

Magic Gel 1000

Magic Gel 2000

Use sequence

Pour the 2 components 1:1 ratio in a becker

Mix the components (30 sec. max)

Pour the product in the particular to fill (1 min.max)

Typical applications

Protection of printed circuits

Electric connections in traps

Garden lighting

Outdoor lighting

Magic Rubber

Bi-component insulating liquid rubber, extremely conformable, flexible and elastic, fire-retardant with high dielectric, thermal, mechanic and elastic characteristics.

Characteristics

- Non toxic and safe.
- Fast in cross-linking (7 minutes at 23°C).
- Flame proof and fire retardant.
- Low smoke and toxic and corrosive fumes emission
- Flexible and elastic
- High mechanical, elastic and thermal properties.
- It cross links at low temperature.
- Accuracy on the reproduction of details.
- Re-enterable.
- No shelf-life.
- Protection degree IP68.
- For installations up to 1 kV .
- UV resistant and weatherproof.

Product code	Kit composition
Magic Rubber	2 bottles for a total of 500 gr 1 small basin 1 mixing spoon

Use sequence

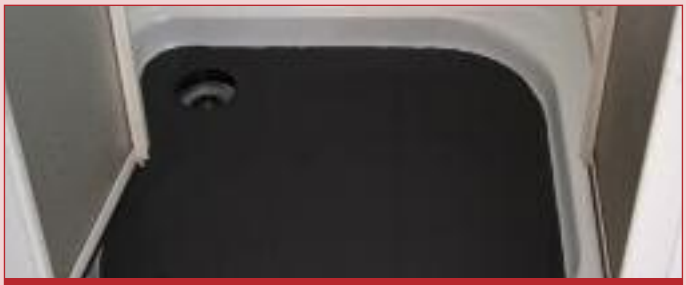
Pour the 2 components 1:1 in a becker

Mix the poured components in the becker (30 sec max)

Pour the product in the particular to be filled (min max)

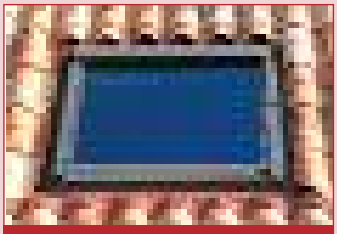
In a few minutes the product becomes rubber!!!

Typical applications



Anti slide mats for showers, bath tubs, etc...

Gumming and sealing protection of interspaces and protection sheets



Rubber moulds e.g. for plaster, resin and cement

Protection against fire

Magic Box

Universal branch kit IP68, suitable for any kind of installation, also directly submerged.

Characteristics

- Great shock resistance.
- Halogen free.
- Non toxic and safe (whether filled or empty).
- No shelf life.
- Re-enterable even after long working periods.
- Self-extinguishing.
- Suitable for any kind of installation also directly submerged thanks to the use of Magic Fluid.
- Perfect for installation and filling in vertical.
- Pre prepared « knock out » walls

Package

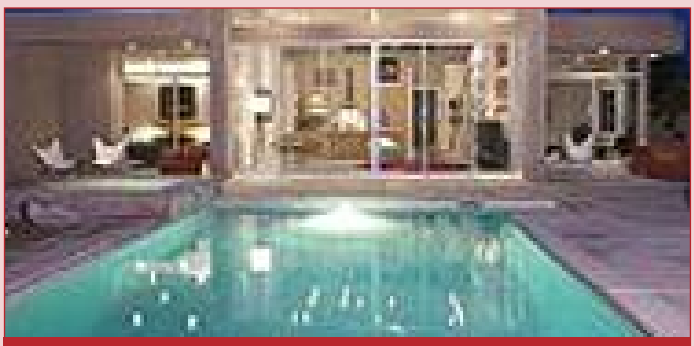
- 1 box
- 1 cover with hook closin
- 4 insulating covering for screw heads.
- 1 cap for the box closing after filing with Magic Fluid (vertical installation).
- 3 M25x1.5.cable glands
- 1 Magic Fluid bag for the filling of the box.

Approvals and specification

- CEI 23-48, IEC 60670 (boxes).
- CEI-EN 50393 (LV cable accessories).
- In Class 2 according to standard CEI 64.8.
- Protection degree higher than IP68 according to standard IEC 529 (when filled with Magic Fluid).
- Halogen free according to CEI EN 50267 2-2.
- Low cloudy fumes emission according to CEI EN 50268 standard.
- Flame retarded according to CEI EN 50265 standard.
- Self-extinguishing and fire and abnormal heat resistance: Glow wire test at +750°C according to EN 60695-2-11.

Product code	Internal dimensions LxPxH (mm)	Ø max. knock out (mm)	Knock out nr.
Magic Box 100	100x100x50	29	8
Magic Box 120	120x80x50	25	6
Magic Box 150	150x110x70	29	10

Typical applications



Swimming pool lighting

Outdoor lighting

Garage – box

Garden lighting

Installation in traps

Ray Box

IP55 boxes with pre prepared « knock out» walls and cover with hokk closing

Package

- box
- 1 cover with hook closing.
- 4 insulating coverings for screw heads.
- 1 cap to close the box after filling with Magic Fluid (vertical installation)

Characteristics

- Great shock resistance.
- Halogen free
- Non toxic and safe.
- No shelf life.
- Self-extinguishing.
- Pre prepared “knock-out” walls.
- Quick release cover.

Approvals and specifications

- CEI 23-48, IEC 60670 (boxes).
- IP55 protection degree according to IEC 529 standard.
- Halogen free according to CEI EN 50267 2-2 standard.
- Low cloudy fumes emission according to CEI EN 50268 standard.
- Flame retarded according to CEI EN 50265 standard.
- Self-extinguishing and fire abnormal heat resistance: Glow wire test at +750°C according to EN 60695-2-11.

Product code	Internal dimensions LxPxH (mm)	Ø max knock out (mm)	Knock out no.	Max. size of cable glands PG	Metric
Ray Box 100	100x100x50	29	8	21	25x1.5
Ray Box 120	120x80x50	25	6	21	25x1.5

Ray Press

Cable glands

Metric

Product code	Metric	assembly hole Ø(mm)	Diameter of the usable cables (mm) min	max
Ray PRESS-16	M16x1.5	16	6	10
Ray PRESS-20	M20x1.5	20	8	13
Ray PRESS-25	M25x1.5	25	12	18

De paso PG

Código artículo	Paso PG	Ø agujero de montaje (mm)	Diámetro cables (mm) min	max
Ray PRESS-PG11	11	19	6	9
Ray PRESS-PG13.5	13.5	20	9	12
Ray PRESS-PG16	16	25	11	14

Self-regulating heating cables

By exploiting a special physical principle, the self-regulating heating cables in contact with the external surface of products to be heated keep pipes, tanks, fire fighting systems, stairs, ramps, sidewalks, etc. ice-free or at the right temperature, optimizing the installation and service costs, thanks to the self-regulating conductive core, which is the heating element of the cable which modulates the power output according to the room temperature.
Also available for exposition to chemicals, up to 120° C working temperature, for installation in safe or classified areas.

Advantages

- The cable can be cut at the required length, jointed or connected on site.
- It does not need thermostats.
- It can be safely overlapped, without the risk of overheating risks.
- It optimizes the costs reducing the power output as the required temperature is reached.
- very easy to install

Applications

Antifreeze protection or temperature maintenance of pipes, silos and tanks.
Heat tracing of ramps, sidewalks, stairs, terraces, balconies and gutters to prevent the formation of ice and to remove the snow.

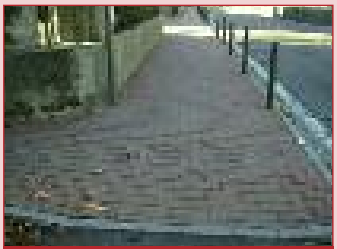
Please contact Raytech for the project, or fill in the on-line forms on our site www.raytech.it.

Typical applications

Typical applications

Terraces

Stairs



Sidewalks

Pipelines

Gutters and downpipes

Self-regulating heating cables
Technical characteristics

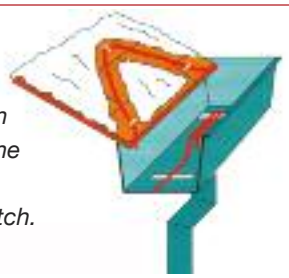
1. Self-regulating heating cables for antifreee tracing of ramps, stairs, terraces, balconies and sidewalks.

Product code	Power at 0°C in concrete (W/m)	Max. working temperature (°C)	max. length switchgear (A) lenght	max (m)	Climatic condition
MCA10	50	65	40 A	100	Suitable for areas with a temperate climate with minimum ambient temperatures not lower than -8°C
MCA20-RAMP	90	120	40 A	64	Suitable for areas with severe climate with minimum ambient temperatures below -8°C

**Magnetothermic switch, "C" or "D" type, with a 30 mA differential protection.*

2. Self-regulating heating cables for the antifreeze protection of gutters and downpipes.

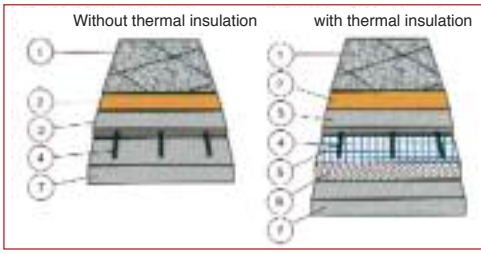
Tracing of the gutters, insertion of the cable in the downspout and tracing of the pitch.



Product code	Power (W/m) In air at 0°C	In chilly water	Max. length (with starting temperature at - 10°C Switch* (A)	Max. length (m)
MCA8	24	40	40 A	100

**Magnetothermic "C switch" type, with a 30 mA differential protection.*

3. Self-regulating heating cables for comfort tracing and to avoid moisture formation on floors



1. Paving tiles
2. Adhesive
3. Self levelling cement, min 2 cm max 6 cm
4. Self-regulating cable
5. Metallic net (option)
6. Polystyrene (or similar) thermal insulation (30 mm min)

Product code	Floor configuration	Room temperature (°C)	Floor temperature (°C)	Cable metres MCA10 for m²	Max. exposition temperature (°C)	Max. cable length with switchgear 16A	20A
MCA 10	Without thermal insulation	20-25	25-32	8 m/m²	65	70 m	105 m
	With 30 mm thermal insulation	20-25	25-32	6 m/m²	65	70 m	105 m

**Magneto thermic "C" type switch,with a 30 mA differential protection.*
Lengths estimated considering a starting temperature not lower than -10°C.

4. Self-regulating heating cables for antifreeze protection or for process temperature maintenace up to +65°C, with exposure to mild inorganic solutions, for classified and non-classified areas

Product code	Power at 10°C (W/m)	Temperature classification (EN50014)	Max. circuit length (starting temperature of -25°C) Switch*	Length (m)
MCA3	10	T6	30 A	195
MCA5	15	T6	30 A	160
MCA8	25	T6	40 A	125

MCA type cable: polyolefine internal and external sheaths
Max. continuous operating temperature with connected cable: +65°C
Max. intermittent exposition temperature with disconnected cable (max. cumulative 1000 hours during cable life): +85°C
Dimensions of the cables: 10,5 mm width x 5 (± 0,5 mm) thickness
Certifications: KEMA 03 ATEX 2042 U for the classified areas (II 2 G Eex-e) according to EN50014 and EN50019 standards.
Resistant to chemicals: suitable for the exposure to light inorganic solutions.
Type of surfaces that can be traced: steel, painted surfaces, stainless steel and plastic.
Min. installation temperature: -30°C

5. Compact Self-regulating heating cable for anti freeze protection or for process temperature maintenace up to +65°C, with exposure to mild inorganic solutions, for classified and non-classified areas

Product code	Power at 10°C (W/m)	Max. length (starting temperature of -25°C) Switch*	Length (m)
MCA6-COMPACT	18	10 A	41

**Magnetothermic "C" type Swicth,with 30 mA differential gear.*

MCA6 compact cable: internal and external sheaths (polyolefines).
Max. continuous operating temperature with connected cable: +65°C
Max. intermittent exposition temperature with disconnected cable (max. cumulative 1000 hours during cable life): +85°C
Dimensions of the cable: 7,7 mm width x 5 (± 0,5 mm) thickness
Certifications: KEMA 03 ATEX 2042 U for the classified areas (II 2 G Eex-e) according to EN50014 and EN50019 standards.
Resistant to chemicals: suitable for the exposure to mild inorganic solutions.
Type of surfaces that can be traced: steel, painted surfaces, stainless steel and plastic.

6. Accessories for self regulating heating cables.

MCA-UNIVERSAL

Universal gel accessory for self-regulating heating cables, which can replace any other solution on the market.
It allows to realize , with a degree of protection IP 68:

- Integrated connections to the power cable
- Pot ends.
- joints between heating cables.
- Branch joints.

Characteristics

Versatile, ready to use, not shelf life, protection degree higher than IP 68 (submerged installation), re-enterable, non

MCA-AL	**Thermal insulation pass-through kit.** It allows the cable to pass through the metallic covering of the thermal insulation, avoiding abrasions and the moisture or water entry under the covering.
MCA-PRESS	**Cable gland** It allows the cable to enter in boxes, to pass through walls.
MCA-SUP	**Support device for gutters and down pipes** It supports and fixes the cable in gutters and down pipes.

For other accessories please contact Raytech.

MCA-SG	**Box** Box with IP 55 degree of protection complete of terminal blocks.
MCA-FV	**Glass Fiber tape.** For the fixing of cables to the pipes (3 turns of adhesive tape every 0,3 meters). 50 meter roll.
MCA-ALL25 **MCA-ALL75**	**Aluminium SELF adhesive tape** For the fixing of the cable. 50 meter rolls.
GUAT25	**Connection kit for classified areas.**
MCA-EA	**Warning label** To be applied for warning over traced

Control unit for temperature and humidity	Humidity and temperature sensor for ramps and stairs	Sensors for gutters	
		Ice and snow sensor for gutters	Temperature sensor for gutters
C2000	**C2000-SR**	**C2000-SUG**	**C2000-STG**

Note
For ramps and stairs: control unit C2000 operates only when connected to sensor C2000-SR
For gutters and downpipes: control unit C2000 operates only when connected to both sensors C2000-STG and C2000-SUG.

FIRE-STOP barriers

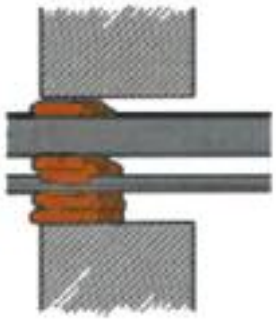
1. FIRE STOP-BAG
fire stop barrier in intumescent bags

Intumescent incombustible bags which stop the passage of fire through openings in walls. They are available in different sizes and they have to be placed to seal the openings, both in walls and floor slabs. At a temperature of 200 ° the material starts to compact sealing the gaps thus avoiding the passage of the flames.

Characteristics
Packed with fireproof material, filled with mineral fibres and expandable compounds.

Approval
- Up to class REI 180; for plasterboard walls, refer to REI 120.
- Non toxic and asbestos free.
- In compliance with circular no. 91/61.

Installation
Finish and opening then lay, the bags as bricks, staggered and overlapped.



Product code	Bag dimensions (mm)
FSB-11	200 x 80 x 20
FSB-12	200 x 250 x 30

For the application on plasterboard walls please contact Raytech

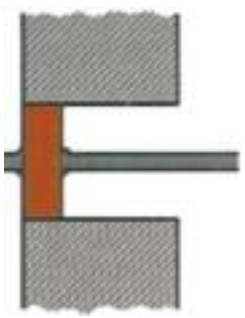
2. FIRE-STOP PANEL fire stop barriers in panels

Incombustible panels treated on the surface with intumescent paint to stop the passage of fire through openings in walls.
Their application allows the sealing ofopenings in walls in a safe and cheap way.

Characteristics
Made of mineral wool and treated on the surface with intumescent, bacteria and mould resistant.paint.

Approval
- Up to class REI 180; for plasterboard walls, refer to REI 120.
- Non toxic, asbestos and solvent free
- In compliance with circular no. 91/61.

Installation
Finish and clean the opening edges then cut the panels with a cutters and position them in the opening. The edges and the jointing lines, as well as the interstices among the cables, are sealed and covered with FIRE STOP SEAL FSS sealant.



Product code	Panel colour	Panel dimensions
FSP-11	Grey	600 x 500 x 54

For the application on plasterboard walls please contact Raytech

3. FIRE STOP COLLAR

fire stop barrier for the pass through of plastic pipes

Prefabricated metal collars for the closing of pass through of plastic tubes. Available in a wide range of dimensions they are applied to surround the plastic tube and fixed to the wall.

Features

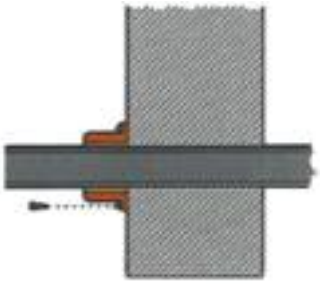
Made of stainless steel they are supplied with internal gaskets made of intumescent materialt, which expands in case of fire to completely close the plastic tube..

Approval

- Up to class REI 180; for plasterboard walls, refer to REI 120.
- Non toxic, asbestos and solvent free
- In compliance with circular no. 91/61.

Installation

They do not need particular care; the opened collar is positioned around the cable supporting tube, closed and fixed to the wall by means of plugs.



Product code	Diameter (mm)
FSC 11	From 40 to 110
FSC 12	From 140 to 160
FSC 13	200

For other dimensions and the installation in plasterboard walls please contact Raytech

4. FIRE STOP TAPE fire stop barrier in intumescent tape for the closing of the pass-through of plastic tubes.

Preformed intumescent tape with high expansion properties for the closing of pass throughof plastic tubes (PVC, PE,PP, Geberit, etc) on walls. It is surrounds the tube in the pass through the with the heat caused by the fire it expands to close all interstices to prevent the fire propagation.

Characteristics

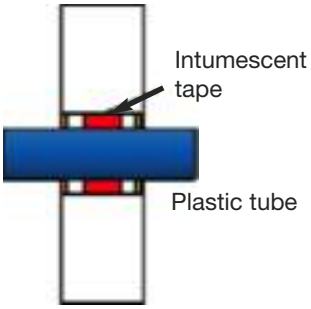
The tape is 1 m long and it can be cut to measure; the remaining parts can be re-used for other applications,as the expansion due to the fire allows the adjacent pieces to give a con-

Approval

- Up to class REI 180.
- Non toxic, asbestos and solvent free
- In compliance with circular no. 91/61.

Installation

They do not need particular care; the tape is applied around the plastic tube, according to the diameter, between the tube and the hole in the wall. It can be useful to seal the edges of the hole with FIRE STOP SEAL FSS sealant.



Ranges of use

Product code	Range of diameters on the tube (mm)	Tape length

5. FIRE STOP SEAL

fire stop barrier in intumescent sealing mastic

Intumescent mastic to seal and close small passages in walls, also in addition to other types of barriers.
It is applied to seal the passage or to install barriers on cable ducts..

Characteristics

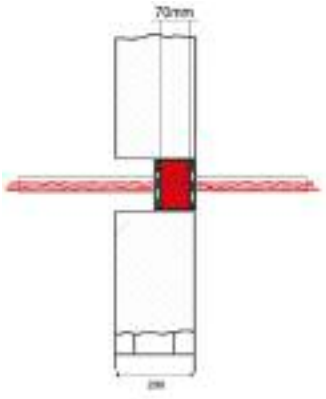
Made of polymers, fireproof fibres and intumescent non-hygroscopic and thixotropic materials in water solution. The /S type, more fluid, can be sprayed or applied with a spatula.

Approval

- Up to class REI 180; on plasterboard walls REI 120.
- Non toxic, asbestos and solvent free; they do not emit toxic gases and dense fumes.
- In compliance with circular no. 91/61.

Installation

After the edges of the openings have been finished and cleaned, the sealant is applied with a spatula for products in drums, with a gun for silicone in case of products in cartridge, or applied with a spatula or sprayed in case of the /S type product.



Ranges of use

Product code	Package
FSS 310	0,3 kg cartridge
FSS 5	Spatula type, 5 kg drumg
FSS 15	Spatula type, 15 kg drum
FSS/S 5	Spray or spatula type, 5 kg drum

For other dimensions or the application on plasterboard walls please contact Raytech.

6. FIRE STOP FOAM

fire stop barriers in expanding foam

Sealing and expanding, one-component foam for the sealing of small openings in walls with a thickness of at least 100 mm. The expanded volume of every can is about 45 lt.

Characteristics

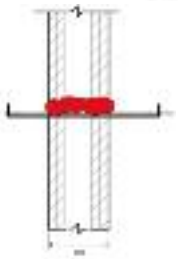
Made of polyurethane fireproof foam charged with graphite, it hardens when in contact with air. Also Suitable for the protection of plasterboard walls.

Approval

- Up to class REI 120.
- Non toxic, asbestos free; they do not emit toxic gases or thick fumes.
- In compliance with circular no. 91/61

Installation

After the edges of the openings have been cleaned, shake the can for at least 30 seconds, then turn upside down and spray the product.



Ranges of use

Product code	Package
FSF 700	700 ml can

7. FSM fire stop barriers in incombustible plaster

Protective coating to seal and prevent fire propagation of openings in walls; it can be applied manually or sprayed. It can be easily mixed in big quantities with suitable mixer (e.g. concrete mixer).

Characteristics

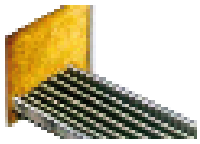
Made of mineral fibres, it can be mixed with water also by means of concrete mixers. Once applied product is insensitive to moisture.
Water quantity: about 0,8 lt/kg (volume 1 kg = about 2 dm^3)

Approval

- Up to class REI 180.
- Non toxic, asbestos and solvent free; it does not emit toxic gases and dense fumes.
- In compliance with circular no. 91/61.

Installation

After the edges of the openings have been finished and cleaned, the incombustible plaster is mixed with water, than applied manually, with a spatula or a pump, and left to dry in air.



Ranges of use

Product code	Package
FSM 20	20 kg bag

For other applications please contact Raytech

8. FSCP
fire stop barriers for ceiling lights coverinG

Incombustible barrier for the ceiling lights covering to maintain the integrity of the fire resistance at ceilings.

Characteristics

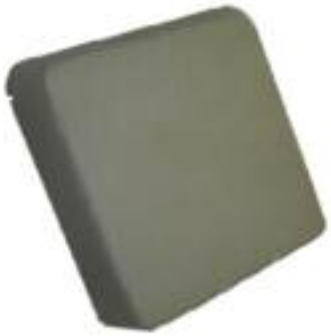
Made of non toxic mineral, fire resistant fibres; it avoids the propagation of the fire and reduces the temperature in the space between slabs and false ceiling. Flexible, light, self-supporting and easy to install and remove.

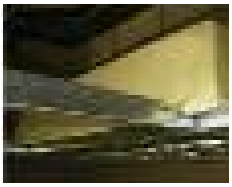
Approval

- Up to class REI 120.

Installation

No special care is required. The protection must be placed on the ceiling light grid adhering to the panel.





Ranges of use

Product code	Dimensions (mm)	Weight
FSCP 600	720 x 750 x 150	about 1,7 kg.

For other dimensions please contact Raytech.

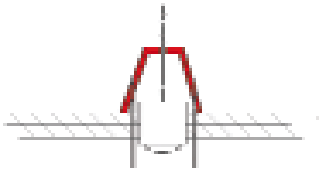
9. FSCF
fire stop barriers for spotlights covering

Incombustible barrier dome for the covering and protection of spotlights in false ceilings; to maintain the integrity of the fire resistance of ceilings.

Characteristics
Made of non toxic fireproof mineral fibres and expandable compounds (which expand up to 5 times the initial volume), it inhibits the propagation of fire and reduces the temperature in the interstices between false ceiling and the slab. With ventilation holes, it avoids the overheating of the lamp. Flexible, light and self-supporting, it is easy to install and remove.

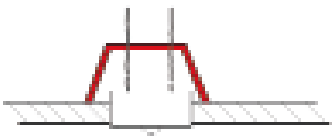
Approval
- Up to class REI 120.
- Non toxic.
- It expands up to 5 times.

Installation
No special care is required. The protection must be placed on the spotlight, adhering to the panel.



Ranges of use

Product code	Dimensions (mm)	Type
FSCF 250	250 x 280	Cone-shaped type
FSCF 350	350 x 230	Dome-shaped type.



For other dimensions please contact Raytech.

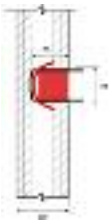
10. FSCI
fire stop barrier for switchgear covering

Incombustible intumescent barrier for the switchgear to maintain the integrity of the fire resistance of the walls.

Characteristics
Made of fireproof fibres and intumescent materials, it reduces the temperature in the wall interstices protecting from the fire propagation.

Approval
- Up to class REI 120.
- Non toxic.

Installation
No special care is required. The protection must be placed on the box, adhering to the wall.



Ranges of use

Product code	Dimensions
FSCI 150	150 x 150

For other dimensions please contact Raytech.

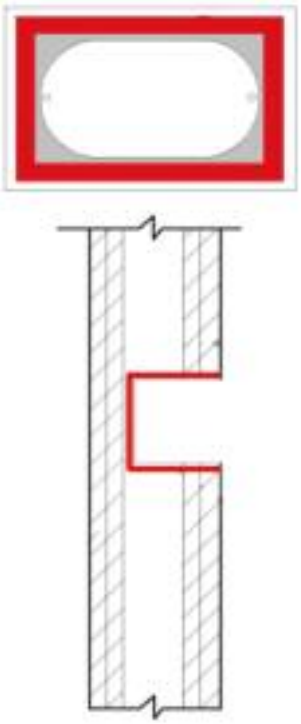
11. FSCC

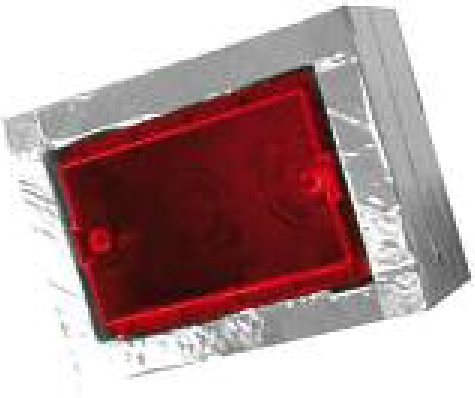
fire stop barrier for boxes covering

System for the protection of electric and termination boxes made of a fire resistant closing; it protects the wall from heat and fire propagation.

Characteristics

The is casing made of calcium silicate;and it contains the box.





Approval

- Up to class REI 120.
- Non toxic and asbestos free; they do not emit toxic gases and dense fumes.
- In compliance with circular no. 91/61.

Installation

After the opening edges have been finished and cleaned, the protection is properly placed and fixed to the wall by means of screws and putty.

Ranges of use

Product code	Dimensions (mm)
FSCC 150	150 x 120 x 75
FSCC 200	200 x 170 x 75

For other dimensions please contact Raytech.

12. FIRE STOP TUBE PROTECTION

fire stop intumescent sleeve

Fireproof intumescent sleeve to close the pass through of metal or plastic tubes to ensure the protection against fire propagation. Available in a wide range of diameters, they are applied to seal the opening. In case of fire the sleeve expands avoiding the passage of the flames.

Characteristics

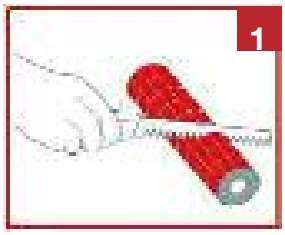
Made of a fireproof and intumescent material, they have a standard length of 300 mm and a thickness of 25 mm. Available for internal diameters from 15 to 170 mm.
In case of plastic tubes, the expansion completely close the opening.

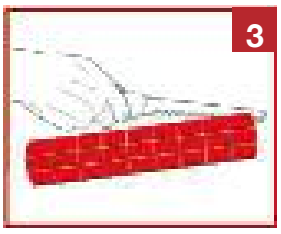
Approval

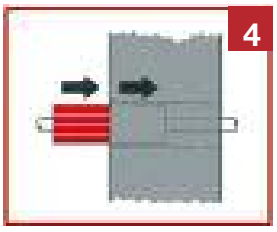
- Up to class REI 120.
- Non toxic and asbestos free.
- In compliance with circular no. 91/61.

Installation

After the opening edges have been finished and cleaned, the sleeve is cut to measure, opened longitudinally, inserted on the tube, then positioned in the wall.







Ranges of use

Product code	Inner dimensions (mm)
FSTP 25	25
FSTP 50	50

For other dimensions please contact Raytech.

Tapes - Cable ties - Expandable braids

Rayteam 0,15

PVC adhesive tape for electrical applications and mechanical protection, for general use. It is self.-extinguishing and does not propagate fire. Conforms to UL510, CEI 15-15, CEI 60454 (EN60454). VDE approved.

Product code	Width	Thickness	Length
Rayteam 1925	19 mm	0,15 mm	25 m
Rayteam 1510	15 mm	0,15 mm	10 m
Rayteam 2525	25 mm	0,15 mm	25 m

Available colours: black, red, blue, grey, white, brown, yellow/green.
Rayteam 2525 is available only in black, white and grey.

Raytech 2.3

EPR self-amalgamating taper for low and high voltage applications (up to 72kV). Conforms to ASTM-D-4388,HH-I-553C/Grade A, MIL-I-3825 B.

Available colour: black

Product code	Width	Thickness	Length
Raytech 2.3	19 mm	0,76 mm	9 m

Raysbar 28

Insulating and sealing tape based on synthetic rubber, applied on an EPR backing, suitable for the covering and the sealing od tubes and their connections, also when fissured. Very high adhesion and sealing characteristics, with high resistence to ozone and weathering. Working temperature from -40 to +90°C.

Product code	Width	Thickness	Length

MCA-ALL 75

Self adhesive aluminium tape for fixing on flat surfaces; it is used also for holes or abrasion repairs on metallic or plastic surfaces. Strong adhesion.

Product code	Width	Thickness	Length
MCA-ALL75	75 mm	0,06 mm	50 m

MCA-FV

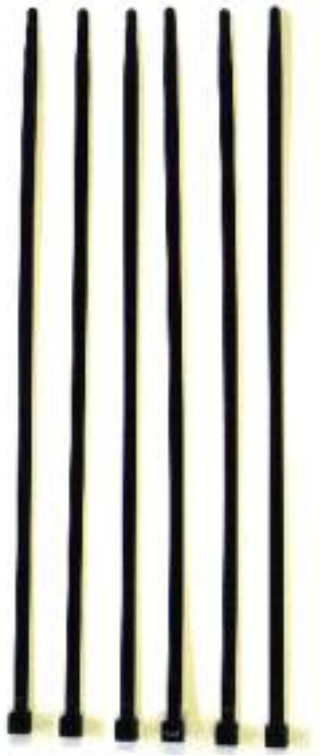
Self-adhesive mono-directional fibreglass tape with poly-propylene support.
It is suitable for any kind of strong fixing.
Inextensible, it is suitable for temperatures up to +130°.

Product code	Width	Thickness	Length
MCA-FV	12 mm	0,13 mm	50 m

Ray-fasc

Cable ties; self-extinguishing according to UL94, UV resistant (mainly the black coloured), halogen free, high resistance to the basis, oils, fats, hydrocarbons, chlorinated solvents.

Working temperature: -40/+85°C



Product code (white)	Width (black*)	Width (mm)	Length (mm)
Ray-fasc B 22/75	**Ray-fasc N 22/75**	2,2	75
Ray-fasc B 25/98	**Ray-fasc N 25/98**	2,5	98
Ray-fasc B 25/135	**Ray-fasc N 25/135**	2,5	135
Ray-fasc B 26/160	**Ray-fasc N 26/160**	2,6	160
Ray-fasc B 26/200	**Ray-fasc N 26/200**	2,6	200
Ray-fasc B 36/140	**Ray-fasc N 36/140**	3,6	140
Ray-fasc B 36/200	**Ray-fasc N 36/200**	3,6	200
Ray-fasc B 36/290	**Ray-fasc N 36/290**	3,6	290
Ray-fasc B 26/370	**Ray-fasc N 26/370**	3,6	370
Ray-fasc B 45/160	**Ray-fasc N 45/160**	4,5	160
Ray-fasc B 48/178	**Ray-fasc N 48/178**	4,8	178
Ray-fasc B 48/200	**Ray-fasc N 48/200**	4,8	200
Ray-fasc B 48/250	**Ray-fasc N 48/250**	4,8	250
Ray-fasc B 48/290	**Ray-fasc N 48/290**	4,8	290
Ray-fasc B 48/360	**Ray-fasc N 48/360**	4,8	360
Ray-fasc B 48/390	**Ray-fasc N 48/390**	4,8	390
Ray-fasc B 48/430	**Ray-fasc N 48/430**	4,8	430
Ray-fasc B 78/180	**Ray-fasc N 78/180**	7,8	180
Ray-fasc B 78/240	**Ray-fasc N 78/240**	7,8	240
Ray-fasc B 78/300	**Ray-fasc N 78/300**	7,8	300
Ray-fasc B 78/365	**Ray-fasc N 78/365**	7,8	365

Packages: 100 pcs.

*** Black colour:** UV stabilised, particularly suitable for outdoors installations.

Ray-exp

Cold expandable braid in dispenser. Flexible, self-extinguishing, resistant to mineral oils, hydrocarbons, alcohol, ammonia and hydroxide, resins, paints. Easy and quick to install, it allows the cold insulation connections, making them high heat resistant (up to + 250°C)

Working temperature: -80/+250 °C

Standard colour: brick red

Product code	nominal diameter	diameter in expanded condition	Spool length (m)
Ray-exp 3/8	3 mm	8 mm	10 m

Display

- Magic Gel
- Magic Rubber
- Super Magic Adhesive - Magic Plast Adhesive
- Sky Plast
- Magic Box 100
- RGPO-B MTR

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